

Puteum habemus in Observatorio ad id paratum, per fornicum foramina cælo pervium, altitudinis à fundo, quò scala commodè ducit, pedum ferme ducentorum, sed operibus fabrorum, supremum fornicem fulcientibus, adhuc impeditum. Itaque nihil nobis per eum hæcenus tentare licuit. Gratias interim Tibi ago maximas, Vir Clarissime, pro communicatis D. Hookii Observationibus, quæ nobis majori erunt incitamento ad correspondentes instituendas. Vale, & me ama.

Observations concerning the Comet that was seen in Brasil, An. 1668. in March, by P. Valentin Estancel a Jesuit, and by him sent to Rome; where they were printed in the 9th Italian Giornale de Letterati, Septemb. 31. 1673.

THIS being the same Comet with that, taken Notice of in Numb. 35. of these Tracts, and our Account, then given of the same, being likely to receive some Advantage and Light from these Observations, made in *Brasil*, and but lately come to our Hands, we thought it would not be un-acceptable to the Curious in *England*, to see them English'd out of the *Italian*, and here inserted. They are as followeth;

There hath not been a *Phænomenon* this great while, of which, as of this, I am now going to describe, we have had Observations from all Parts of the World. Those from *Europe* and *Asia* may be seen in our 3d and 4th *Giornale*. Now I have received those of *America*, made in the City of *St. Salvador*, in the Southern Latitude of 12 deg. 47 min. Likewise the Jesuit P. *Pietro Sufarte*, Rector of *Macao*, in the *East-Indies*, well vers'd in Matters Astronomical, writes to have seen the same all along the Coast of *Bona Speranza*, though he communicates no particular Observations, because he wanted Instruments to make accurate Ones, and to see the *Head* of this Comet.

To come then to the *Brasilian* Observations, it hapned, that on the 5th of *March* 1668. (*st. n.*) at 7 a Clock at Night, the Sun being then in *Piscis*, Father *Estancel* began to see this Comet a little above the Horizon from West to East-South-East. That which somewhat surpris'd him was, that at the very Beginning it appear'd in its greatest Bulk, and with extraordi-

nary Brightness, which is not usual in Comets, they being wont first to appear small, and by little and little greater. The Beginning of its Tail was a little under the two lucid Stars, the 15th and 16th. of the *Whale's*-Back, over which it then pass'd, its Point being as 'twere at the 8th and 9th, which are in the bottom of the *Whale's*-belly; and thus the whole Length thereof was of about 23 Degrees. The Globe or Head of it was so small and thin, that very few could discern it with the naked Eye; and the Father needed a Telescope to see it well.

The 6th of *March* it was cover'd with Clouds; and the 7th of the same, the former Brightness was somewhat less, and become so thin, that the Eye could easily see the Stars that were behind it, which, by Conjecture, were the 14th and 20th.

The 8th, there were discover'd more fix'd Stars behind the Chevelure; from the 8th, 10th and 11th Day, until it came to the little *Hare* and to *Eridanus*, certain small Stars, being in that Celestial River, did likewise shine forth through it.

The Tail was always directly opposite to the Sun; and when it appear'd the first Time, almost Horizontal, it was seen in the Form of a Pillar, the Head standing a little under and on the Side of the Star of the *Whale*, which is in the Latit. of 15 deg. 46 min. and in the Longit. of the 12 d. 42 min. of *Aries*. And the Point did have the 14th, North of the three that are in the Belly, in the Latit. of 20 d. 30 m. and the Long. of 15 d. 57 m. of *Aries*.

As to the Colour of this Comet, it was at first very splendid, and cast it self with that Vividness upon the Sea, that the Rays thereof were reverberated unto the Shore, where the Observers stood. But this Brightness lasted only for three Days, after which it did considerably decay. But that which seem'd somewhat strange, was, that having lost so much of its Light, yet its Bulk was not diminish'd but continued rather increasing until the Comet dis-appeared.

The *P. Estanzel* saith, he could not establish any Thing certain touching the true Magnitude of this Comet, because it lasted but a little Time, and stood always near the Horizon. Mean time he observed, that it passed more swiftly than *Venus*, which possibly, at the Beginning of this *Phenomenon*, might have past the tenth Degree of *Aries*. Whence he infers, that it was *under Venus*; yet the Anticipation was not so great, that it could be believed to be *under the Moon*, as he would have it; adding, that it could not be seen by all the Inhabitants of the Southern Hemisphere, nor of the Europeans unto the 78th deg. of the Northern Pole, to whom it was Horizontal, and therefore hardly visible by Reason of the Vapours of the Atmosphere.

It may be taken Notice of, that a Month before, upon a Report that a Comet had been seen towards the Morning in the Horizon of the rising Sun, and certain *Carmelites*, that live upon a Hillock of the said Town, having affirmed, that they had observed it several Times; our *P. Estanzel* began to doubt, whether the Comet, he saw, were not the same, which, more swift than the Sun, according to the Succession of the *Signs* might within that Time have got clear of the Solar Rays; and his Suspicion grew the stronger, because the Head was then turned towards the Sun, and the Tail towards the West, opposite to the same.

It may also be noted, that at *St. Salvador* this Comet appear'd not so long, as at *Rome* and at *Goa*; but then, the Head thereof was seen in *Brasil*, which was not not possible to be seen elsewhere.

Brief Directions how to Tan Leather according to the New Invention of the Honourable Charles Howard of Norfolk, experimented and approved of by divers of the principal Tanners using Leaden-hall Market.

EVERY Part of the Oak-tree, of what Age or Growth soever, and all Oaken Copice-wood, of any Age or Size, being cut and procured in Barking Time, will Tan all Sorts of Leather as well, at least, as Bark alone.

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